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January 13, 2004

Mr. Arthur Bourlard The Lockformer Company 711 Ogden Avenue Lisle, IL 60532-1399



Subject:

Electrical Resistance Heating Status Report

The Lockformer Company, Lisle, IL

Dear Mr. Bourlard:

The purpose of this letter report is to present a brief description of the electrical resistance heating (ERH) operational activities for the period from **January 5, 2003** to **January 12, 2004**. The field activities, ERH system results, and planned work are presented in the following sections.

ERH Field Activities

During the week of January 5, 2003 TRS was on-site to continue operations of the ERH system. ERH system operational data were collected and adjustments made to optimize the effectiveness of the ERH system in the localized areas above the clean-up goals. The following operational changes were made during the week of January 5, 2003:

- 1. Vacuum and water drip was shut-off to electrodes C7, D7, E7, F7, G8, H9, H10, B11, C11, A12, B12, C12, D12, E12, F12, A13, E13, F13, G13, E14, F14, F15, and G19.
- 2. Vacuum was shut-off to all electrodes in Area 2A.
- 3. Increased flow, vacuum and drip water was applied to electrodes D8, E8, D9, E9, F9, G9, D10, E10, F10, D11, E11, F11, B13, C13, D13, B14, C14, D14, C15, D15, E16, F16, G16, E17, F17, G17, F18, and G18.
- 4. Increased drip water was applied to electrodes L17, K18, M18, N18, J19, M19, L20, M20, and O20 in Area 1.
- 5. Electrical phases were changed going to electrodes D14 and G17 to permit the voltage to be increased to the entire electrode field.

The changes indicated above were made in an attempt to optimize vapor capture and increase the energy input in the areas that showed VOC contamination in soil that remained above the cleanup goal. As a result of these changes both vacuum and flow were increased to electrodes in Area 2B and 2C and air flow was increased

to Area 2D while vacuum remained constant. In addition, the electrical voltage was increased from 144 volts to 193 volts.

The voltage applied from January 5, 2004 to January 12, 2004 was approximately 161 volts resulting in an overall average power input of 663 KW including downtime. The total energy input up to January 12, 2004 was 3,087,419 KW-Hr.

The ERH system experienced the following downtime during this reporting period:

 <u>January 12, 2004</u>: PCU output shutdown at approximately 07:00 CST due to the Lockformer building alarm which was tripped accidentally by Lockformer personnel. The PCU output was placed back on-line at 10:30 CST on January 12, 2004.

The total downtime from June 25, 2003 to January 12, 2004 has been approximately 30 days, of which approximately 13 are attributable to either Lockformer or CGS and an additional 7 days were caused by confirmatory soil sampling in Area 2.

ERH System Results

Temperatures

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The subsurface temperature in the newly heated Areas 1D and 1E increased approximately 10° C over the reporting period and has remained essentially unchanged in Areas 1F, 1G, and 1H. The subsurface temperature has increased by approximately 4° C in Area 2B and by 2° C in Area 2C over the reporting period. The subsurface temperature in Area 2D has remained essentially unchanged over the reporting period.